




Re: Mink Model 
Chip Humphrey to: Burt Shephard
Cc: Kristine Koch, Lori Cora, Sheila Fleming

02/08/2013 12:02 PM

Burt

Thanks for the response. My understanding is that John hasn't provided the details of his model, although he references some of the assumptions used in Appendix E of the FS. I think eventually we'll need to get the info and take a look, as it's likely to come back around to us one way or another - even if we keep it out of the BERA and the revised FS. He also tacks on an uncertainty allowance based on info in the food web model (from the LWG FWM report) that we should check that is part of his argument for using different PRGs.

Chip

Burt Shephard

Kristine, The simplest defense of the mink evalu...

02/08/2013 10:13:42 AM

From: Burt Shephard/R10/USEPA/US
To: Kristine Koch/R10/USEPA/US@EPA
Cc: Chip Humphrey/R10/USEPA/US@EPA, Lori Cora/R10/USEPA/US@EPA, Sheila Fleming/R10/USEPA/US@EPA
Date: 02/08/2013 10:13 AM
Subject: Re: Mink Model

Kristine,

The simplest defense of the mink evaluation in the BERA is to point any questioners to page 5 of the AOC for the site, which states:

"RI/FS work for uplands facilities is being or will be conducted pursuant to separate agreements or orders issued by DEQ or EPA and is not covered by this Order which is for the in-water portion of the Site."

The BERA mink evaluation within the RI describes risks to mink solely from their exposure to contaminants in the in-water portion of the Portland Harbor site.

To do that, the mink was one of several wildlife species in the BERA whose exposure assessment was based on a diet consisting of 100% aquatic species. EPA's Wildlife Exposure Factors Handbook cites a number of studies of mink diet in the wild. Depending on which study one chooses, mink diets can range between nearly 100% aquatic species to nearly 100% terrestrial species. While there is a technical and ecological argument to be made that a mink diet should consist of a mix of aquatic and terrestrial species, the fact remains that the AOC limits the RI/FS to evaluation of the in-water portion of the site. This limitation necessitates limiting the BERA to evaluating in-water risks, not risks from a mix of in-water and upland exposures to contaminants.

The above doesn't begin to evaluate technical merits of whatever John Toll presented earlier this week. Issues that could be raised include data quality issues regarding contaminant concentrations in upland media, the dietary fractions they are using for mink (i.e. what do they eat and how much of each prey item do they eat). home ranges and habitats to which they assume mink are exposed. Without seeing John's latest model, we have no idea if his exposure assessment or toxicity reference values has changed from the BERA, and if it has, if the changes are technically supportable.

If LWG wants to argue that the risk characterization for mink should include risks from exposure to upland contaminants, our counter should be that the BERA is incomplete and not approvable by EPA, as it does not evaluate any ecological risks to fully terrestrial receptors.

Best regards,

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"Facts are stubborn things"
- John Adams

Kristine Koch

[Burt - I heard that John Toll presented a new mi...](#)

02/07/2013 02:52:10 PM

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Fleming/R10/USEPA/US@EPA
Date: 02/07/2013 02:52 PM
Subject: Mink Model

Burt - I heard that John Toll presented a new mink model yesterday at the conference. Someone in the session asked if the current mink model in the Portland Harbor BERA was now over estimating risk and he said yes. With the group of 45 already having issues with this, how prepared are we to defend the work done in the BERA.

Kristine Koch
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